Attorney Docket No. H0005517-4510 Express Mail No. EV 375288836 US

CLAIMS

What is claimed is:

1. An azeotrope-like composition comprising effective azeotrope-like amounts of HFC-152a and CF₃I.

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2. The azeotrope-like composition of claim 1 which consists essentially of from about 35 to about 55 weight percent of HFC-152a and from about 45 to about 65 weight percent of CF₃I.

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3. The azeotrope-like composition of claim 1 which consists essentially of from about 35 to about 43 weight percent of HFC-152a and from about 57 to about 65 weight percent of CF₃I.

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4. The azeotrope-like composition of claim 1 having a boiling point of from about -23°C to about -28°C at a pressure of about 14.42 psia.

5. The azeotrope-like composition of claim 1 having a boiling point of from about -24°C to about -28°C at a pressure of about 14.42 psia.

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6. The azeotrope-like composition of claim 1 having a boiling point of from about -25°C to about -28°C at a pressure of about 14.42 psia.

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7. The azeotrope-like composition of claim 1 having a boiling point of from about -26°C to about -27.5°C at a pressure of about 14.42 psia.

8. The composition of claim 1 further comprising an effective stabilizing amount of stabilizer.

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9. The composition of claim 8 wherein said stabilizer comprises at least one phenol compound and at least one epoxide selected from the group consisting of aromatic epoxides, alkyl epoxides, alkenyl epoxides, and combinations of two or more thereof.

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- 10. The composition of claim 1 further comprising a lubricant.
- 11. The composition of claim 10 wherein said lubricant is selected from the group consisting of mineral oil, alkyl benzenes, polyol esters, polyalkylene glycols, and combinations of two or more thereof.
- 12. A refrigerant composition comprising an azeotrope-like composition of claim 1.
- 13. The refrigerant composition of claim 12 further comprising a lubricant.
- 14. The refrigerant of claim 13 wherein said lubricant is selected from the group consisting of mineral oil, alkyl benzenes, polyol esters, PAG oil, and combinations of two or more thereof.
- 15. A refrigeration system comprising a refrigerant of claim 12.
 - 16. A method for cooling an article which comprises condensing a refrigerant composition of claim 12 and thereafter evaporating said refrigerant composition in the vicinity of the article to be cooled.
 - 17. A method for heating an article which comprises condensing a refrigerant composition of claim 12 in the vicinity of the article to be heated and thereafter evaporating said refrigerant composition.
- 25 18. A sprayable composition comprising a material to be sprayed and a propellant comprising an azeotrope-like composition of claim 1.
 - 19. A sprayable composition according to claim 18 wherein the sprayable composition is an aerosol.
 - 20. A blowing agent comprising an azeotrope-like composition of claim 1.

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- 21. An azeotrope-like composition comprising effective azeotrope-like amounts of HFC-152a, HFO-1234 and CF₃I.
- The azeotrope-like composition of claim 21 which consists essentially of from about 10 to about 95 weight percent of HFC-152a, from about 1 to about 70 weight percent of CF₃I, and from greater than zero to about 70 weight percent of HFO-1234.
- The azeotrope-like composition of claim 21 which consists essentially from 20 to about 95 weight percent of HFC-152a, from about 1 to about 65 weight percent of CF₃I, and from greater than zero to about 65 weight percent of HFO-1234.
 - 24. The azeotrope-like composition of claim 21 which consists essentially from 20 to about 95 weight percent of HFC-152a, from about 1 to about 65 weight percent of CF₃I, and from greater than zero to about 25 weight percent of HFO-1234.
 - 25. The azeotrope-like composition of claim 21 which consists essentially of from about 20 to about 40 weight percent of HFC-152a, from about 35 to about 65bweight percent of CF₃I, and from greater than zero to about 15 weight percent of HFO-1234.
 - 26. The azeotrope-like composition of claim 21 having a boiling point of from about -23°C to about -28°C at a pressure of about 14.42 psia.
- 25. The azeotrope-like composition of claim 21 having a boiling point of from about -24°C to about -27°C at a pressure of about 14.42 psia.
 - 28. The azeotrope-like composition of claim 21 having a boiling point of from about -24.5°C to about -26.7°C at a pressure of about 14.42 psia.
 - 29. The composition of claim 21 further comprising an effective stabilizing amount of stabilizer.

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30. The composition of claim 29 wherein said stabilizer comprises at least one phenol compound and at least one epoxide selected from the group consisting of aromatic epoxides, alkyl epoxides, alkenyl epoxides, and combinations of two or more thereof.

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31. The composition of claim 21 further comprising a lubricant.

The composition of claim 31 wherein said lubricant is selected from the group 32. consisting of mineral oil, alkyl benzenes, polyol esters, polyalkylene glycols, and combinations of two or more thereof.

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- A refrigerant composition comprising an azeotrope-like composition of claim 21. 33.
- The refrigerant composition of claim 33 further comprising a lubricant. 34.

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The refrigerant of claim 34 wherein said lubricant is selected from the group 35. consisting of mineral oil, alkyl benzenes, polyol esters, PAG oil, and combinations of two or more thereof.

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A refrigeration system comprising a refrigerant of claim 33. 36.

A method for cooling an article which comprises condensing a refrigerant 37. composition of claim 33 and thereafter evaporating said refrigerant composition in the vicinity of the article to be cooled.

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A method for heating an article which comprises condensing a refrigerant 38. composition of claim 33 in the vicinity of the article to be heated and thereafter evaporating said refrigerant composition.

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39. A sprayable composition comprising a material to be sprayed and a propellant comprising an azeotrope-like composition of claim 21.

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A sprayable composition according to claim 39 wherein the sprayable composition is an aerosol.

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41. A blowing agent comprising an azeotrope-like composition of claim 21.

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